

CASE STORY MARINE04: Marine Extractive Reserves | Brazil | Caribbean | Austral & Neotropical Americas

The Conservation Challenge

The protection of marine species and ecosystems in northeast Brazil has been stated to be successful, such as the case of the Abrolhos National Marine Park, and there are current movements toward creating marine protected area (MPA) networks. However, the implementation of marine extractive reserves (MERs) has resulted in unintended consequences such as conflict between and among stakeholders^{1,2}. MERs in Brazil are a unique conservation unit that allows extractive use by traditional populations. It is derived from the terrestrial extractive reserve (RESEX) model that originated from the environmental social movement of Chico Mendez and rubber tappers in the Brazilian Amazon in the 1970s³. Extractive reserves offer a new approach to biodiversity conservation in that they aim to protect traditional communities, their livelihoods and the resources they depend upon thereby integrating the goals of biodiversity conservation and sustainable livelihoods¹. In the Northeastern state of Bahia, MERs have been established in order to protect priority coastal and marine habitat and the livelihoods of traditional small-scale fishers. The region is a priority area for conservation in Brazil⁴. The Atlantic Forest Biodiversity Hotspot¹ meets priority coastal and marine habitat such as mangroves, estuaries and coral reefs. For example, the Abrolhos National Marine Park, 60 km off the coast of southeastern Bahia, contains the largest and most biodiverse reef of the southern Atlantic ocean⁵. The nearby Cassurubá MER is home to 95% of the Abrolhos Bank's mangroves and estuaries that provide critical nursery habitats for reef fishes. The area has high diversity of fishes, crustaceans and shellfish and harbors the endangered Giant Grouper (*Epinephelus itajara*). The marine waters of the Abrolhos Bank are also birthing grounds for the humpback whale (*Megaptera novaeangliae*). The Cassurubá MER is ideal from an ecological perspective as it encompasses 100,687 ha of terrestrial, coastal and marine habitat. However it intersects with two livelihood systems and the author's preliminary research shows how its establishment has resulted in conflict and contradictions as will be discussed below.



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Stakeholder Perspectives

Fisherfolk, Partners and Reserve Creation

The creation of the Cassurubá MER was a structured process that involved various stakeholders. The Brazilian Institute of Environment and Renewable Natural Resources (IBAMA), Chico Mendez Institute for Biodiversity (ICMBio), Conservation International (CI) and other local NGOs and fishing community members mobilized for the creation of the reserve⁵. Apparently fisherfolk wanted to create the MER to prevent the exploitation of their resources by outsiders. There was also the threat of constructing Brazil's largest shrimp farm in the area's mangroves. The reserve was officially decreed in person by the president of Brazil at the time in 2009. The MER establishment was sad to be a participatory process and a map presented to the communities at the time of establishment according to the author's interview with key actors in 2011.

MER Resource Users/Beneficiaries

While, fisherfolk, both men and women view the MER as a means to secure and sustain their resources, the residents of the terrestrial space must deal with its unanticipated consequences. More specifically, the Cassurubá MER covers land and marine spaces and the community members that utilize MER resources are; fisherfolk, including men and women who fish and extract shellfish and crustaceans; and the residents of the terrestrial area that conduct small scale cultivation and other

¹ Biodiversity Hotspots are priority areas of conservation designated by Conservation International (CI). It is said that only 4-7% of this coastal tropical forest remains due to its colonization and deforestation of the region. See <http://www.biodiversityhotspots.org> for more information.

extractivist activities. Preliminary research findings of the author suggest that not all resource users are aware of the location, extent or objectives of the MER as determined by key actors, legal codes and maps. More specifically resource users interviewed perceive the MER as two separate events; one involving the marine area which they think has not happened yet and one involving the terrestrial area and residents of Cassurubá where it has happened. Another unexpected finding is that the institution of the MER as a conservation unit has overridden previously instituted usufruct rights (land use rights) of the residents of the terrestrial area. There are now new rules in place for these residents as implemented by IBAMA despite the fact that no participatory management plan has been developed. These resource user groups (fisherfolk and residents) are beneficiaries of the MER as will be discussed below.

Agency Regulators

The MER is a federally mandated unit and the administrator of the Cassurubá MER is the National System of Conservation Units (SNUC). The MER process should be participatory and include public consultation and decision-making processes from its initial movement, toward establishment and the development of a management plan, according to SNUC, Federal Decree 4340, Articles 2- 5, 2002⁶. It is a decentralized form of resource governance that includes several stages. First, reserve beneficiaries must be identified before the unit is decreed. In the case of Cassurubá ~1500 fisherfolk and ~350 resident families have been identified. Second, once the reserve is established, a deliberative council must be formed which is constituted by 50% +1 beneficiary representatives and remaining, various levels of government, NGOs, private actors and other civil society groups. The deliberative council is then the decision-making body for reserve management and is supposed to represent all stakeholders. As for the 50%+1 beneficiary chairs, they are to be held by presidents of community associations of Cassurubá MER. The creation of the management plan is the final step and in the case of the Cassurubá, the MER has a manager who is an official of IBAMA/ICMBIO. Rules are being created and enforced in the Cassurubá MER by these government officials despite the lack of a management plan. Other examples of MERs and marine protected areas in Brazil have yet to create management plans⁷. For example the Corumbau MER north of Cassurubá which was established in 2002 still does not have a management plan¹

Environmental Advocates

Environmental stakeholders of the Cassurubá MER include Conservation International (CI) and local NGOs such as Ecomar and the Humpback Whale Institute (IBJ). Both CI and Ecomar contribute to biological assessment of the Cassurubá MER and Abrolhos Bank. CI was a main facilitator to the MER establishment and current governance process and also conducts socio-economic assessments of the area. Ecomar has focused on ecotourism and technical training activities in addition to biological assessments and runs various projects. For example, Ecomar has trained ten local individuals in the monitoring of the Abrolhos coast and two of the monitors are for Cassurubá MER. They also lead a local project for Giant Grouper photo identification. Finally, they have helped to create trails along the Cassurubá terrestrial area and are conducting ecotourism initiatives. IBJ is the central research institute for humpback whales. All three of these NGO actors contribute scientific knowledge and technical training to Cassurubá MER and its various stakeholders.

Economic Context and Development Advocates

The municipality of Caravelas, the larger of the two beneficiary cities that the Cassurubá MER pertains to, was settled in 1581 by the Portuguese. It's a historic city with antique Portuguese architecture that once thrived from timber extraction, fishing activities and whaling. Nowadays, however the city is "falling apart" according to many residents. The main economic activity for locals today remains to be fishing whereas a Eucalyptus company (FIBRIA) with a maritime port in Caravelas also provides residents jobs. Also, Caravelas is the closest and main port area for tours to the Abrolhos Marine Park and tourism to the Abrolhos has been another economic activity. However it has dropped substantially in the last decade according to locals. The main reason behind the decline in tourism is said to be the recent economic collapse. However, Caravelas is difficult to get to, ever since its airport closed years ago. There are current claims of re-opening of the airport because the closest airport is a four hour car drive or six hour bus ride away. Further, most tourists go in and out quickly and do not spend much time or money in the city. Unfortunately, Abrolhos tourism contributes little revenue to the city and its residents since the major profits are gained by tour-boat operators that are outsiders. Another development issue is with the local fisheries. The media about the creation of the Cassurubá MER states that it will create 20,000 jobs for fishermen⁵, however is it not clear how this can happen. Fishermen are already fishing and income is at poverty levels and many do not own boats. Further, the goal to deliver exclusive use concessions to the beneficiaries of Cassurubá is⁸ could

lead to exclusion of some resource users as has been shown in other cases⁹. The delivery of concessions has not happened yet due to lack of beneficiary community organization according to government officials. However, once concessions are delivered, they can get access to low interest credit through the federal government National Program of Land Reform (INCRA). It will be interesting to see how this conservation initiative will play out.

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